## ISLANDS IN THE BUSH: MANAGEMENT OF GRANITE OUTCROPS

## WORKSHOP: Managing granite landscapes

## Proposals for the protection and utilisation of granite hills

Following the presentation of papers concerned with various aspects of the natural history and utilisation of granite hills, with special reference to occurrences in the Wheatbelt of Western Australia, it became evident in discussion that the hills are regarded as resources on which there are conflicting, even mutually exclusive, claims. In particular, the granite exposures are variously of interest to those concerned with quarrying, water conservation, tourism, recreation, biological conservation and scientific research.

It was unanimously (or *nemine contradicente?*) agreed that rather than dealing with claims and proposals on an *ad hoc* basis (which offers no basis for comparative merits) these interests could best be served and evaluated by an overall review of the qualities of various exposures and a listing or register of all major occurrences and attributes together with a rating in terms of the various possible aspects and claims. It was agreed this register should be compiled by a group of independent, impartial and knowledgeable people.

To this end it was suggested that the Royal Society of Western Australia appoint a Working Party to initiate and oversee the project, and that funds be sought from government sources and private foundations. Such funds would be used first, for the appointment of an officer who would act as secretary and administrative coordinator for the project, and second, to underwrite the costs of the trial surveys and resultant reports and guide books, and any costs incurred by the Working Party in their technical role. The collaboration of a shire council, or councils, would be sought and welcomed, as would the involvement of interested local groups and residents.

It was suggested that various survey and assessment methods be trialled in small regions such as particular shires or regions (e.g. Kondinin and Dundas shires, and the Monadnock Conservation Park in the Darling Range, to test procedures and criteria in contrasted environments), and amending procedures in light of that experience. Principles, methods and criteria would be outlined and set out in a booklet or set of guide lines, so that they could be put into practice by multiple teams to produce a consistent state-wide review. The Society Working Party could help supervise the surveys in an effort to maintain consistency and resolve the problems and difficulties that would indubitably arise. Such surveys would not only form the basis for evaluation but would also produce a record of the granitic terrains at this time. Any assessment would be subject to consultation and review, but once finally determined should carry legal force.

Much of the basic information concerning the location, size and shape of granite outcrops in Western Australia is already published, for not only are most, and certainly all major, granite outcrops already delineated on geological survey maps but there is a complete coverage of air photographs, a considerable amount of topographic information is available, and detailed analysis of granite exposures from Landsat imagery is in train; all this in addition to special purpose maps, air photographs and reports. The problem is to collect, collate and coordinate the raw data and bring it together in a form suitable for use by survey and assessment groups.

In later discussion, several potential difficulties and concerns were aired. For example, the question of public liability on tourist sites, and of confidentiality in matters of Aboriginal sites were raised without being resolved. It was pointed out that the availability of a data-base on granite rocks may well invite unwelcome interest from developers for example, but ways of guarding against this and limiting access while following the principle of disseminating knowledge were not forthcoming. There was no unanimity as to what form of signage is most suitable in different situations and for different purposes, but it was agreed that protective measures must be in place before people were introduced to the sites. It was agreed that visitors should be gently but firmly directed along designated paths which lead to interesting but durable sites but away from delicate and vulnerable features. Any easily damaged sectors or features on or near designated paths should be protected, so that patches of soil and flora for example would be provided with paths or stepping stones of local rock or of suitable decking. The need to establish biological resource areas from which to restock depleted outcrops was recognised and unanimously supported.

Previous experience in Western Australia suggested that the support and goodwill of the geological fraternity (especially the mining and exploration or prospecting sectors) in the survey and assessment procedure would not be automatic and may not readily be obtained.

Thus, though some problems remain unresolved, they were raised and aired, and there was strong support for the establishment of an overall survey and evaluation of granite hills and unanimous agreement that the Royal Society ought to be the key player in organising and administering the survey.

## C R Twidale

Department of Geology and Geophysics, University of Adelaide, Adelaide SA 5005